

AMENDMENTS TO THE DRAWINGS:

Replacement Sheets 1/10, 2/10, 3/10, 4/10 and 5/10 are provided. In Sheet 1/10, a prior art legend has been added to Figure 1. In the remaining sheets the unlabeled rectangular boxes have been amended to add descriptive text labels. No new matter is entered by way of these amendments.

REMARKS

Claims 26, 27 and 33 were indicated to be directed to allowable subject matter.

The recitations of allowable claims 26 and 27 have been incorporated into claim 23. Allowance of claim 23 and its dependent claims is therefore solicited.

Allowable claim 33 has been amended to be in independent form. Allowance of claim 33 is solicited.

Claim 34 has been amended to include features from allowable claims 26-27 as well as claims 37-38. Claims 37-38 have been amended to include features from allowable claims 26-27 respectively.

The claims have also been amended to clarify that the "four pseudorandom navigation codes" are "four distinct and independent pseudorandom navigation codes" as disclosed by specification page 4, lines 30-31.

No new matter is entered by way of these amendments.

Allowance of all the claims is solicited.

The drawings were objected to. Replacement Sheets 1/10, 2/10, 3/10, 4/10 and 5/10 are provided. In Sheet 1/10, a prior art legend has been added to Figure 1. In the remaining sheets the unlabeled rectangular boxes have been amended to add descriptive text labels. No new matter is entered by way of these amendments. Withdrawal of the drawing objection is solicited.

The specification has been amended to add section headings.

The Official Action makes a statement concerning an Information Disclosure Statement filed June 7, 2008. No such Information Disclosure Statement was filed. An Information Disclosure Statement was filed on June 7, 2005 and the PTO-Form 1449 provided with the present Official Action indicates that each of those references has been considered. Clarification is requested as to whether the June 7, 2005 IDS was unsatisfactory in any respect.

Claims 23-25 and 28-31 were rejected as obvious over HORI 5,459,763 in view of OHTOMO 5,995,233 and in further of CANGIANI 6,335,951.

Claims 34-44 were rejected as obvious over HORI in view of BESSACINI 5,637,826.

On page 4 of the Official Action, paragraph 28, there is a statement that the modulation technique specified in claims 35-44 does not change the design of the device that is claimed within claim 34. However, as now amended, specific recitations are provided. These recitations have been indicated to be directed to allowable subject matter.

Although the claims have been amended to recite allowable subject matter, applicant provides the following Remarks demonstrating the non-obviousness of the present claims.

The Examiner considers that the modulation technique features do not change the design of the device (see § 26 and 28). However, this is not true: a PSK modulation scheme is directly and only linked to the design of the electronical circuit.

A BPSK modulator cannot provide a QPSK modulation nor a 8-PSK modulation. A QPSK modulator cannot provide a 8-PSK modulation. Therefore, the modulation scheme features do hold a patentable weight since they limit the device according to the specific circuit design adapted to provide such a modulation scheme.

In other words, the modulation scheme features are to be considered as technical function features for the device as claimed.

Additionally, HORI relates to a receiver having 4 channels separately receiving 4 GPS navigation messages from 4 distinct satellites. All the signals arriving from the satellites are mixed by mixer 3 with a local oscillating signal, which produces intermediate frequency signals that are supplied to receiving processors of respective channels. See col. 5, lines 16-48. Thus HORI does not teach a method of generating a modulated navigation signal, but only a GPS receiver.

Also, HORI uses one PSK demodulator for each navigation message, i.e. 4 PSK modulators. However, HORI does not teach in any manner a 8-PSK modulation scheme as claimed. Each modulated

navigation signal received by HORI receiver is a GPS navigation signal, PSK modulated on a specific channel, i.e. a specific carrier. 8-PSK was not and has never been used on GPS navigation signals. In any case HORI does not mention nor teach in any manner a *"8-PSK modulation"* as claimed.

Also, in HORI the four received signals are modulated on four different carriers. HORI does not disclose nor teach *"four pseudorandom navigation codes modulated onto the carrier"* as claimed.

Thus, the Official Action statement 11 is wrong as regards HORI.

OHTOMO neither discloses nor teaches in any manner the above-mentioned features which are neither disclosed nor taught by HORI.

OHTOMO does not concern navigation signals, but only a surveying optical system. It neither discloses nor teaches four pseudorandom navigation codes modulated onto the carrier according to a 8-PSK modulation as claimed. For this reason, we cannot see how one skilled in the art could see fci and Ni in OHTOMO as stated in Examiner's objection 12.

Col. 19, lines 34-38 of OHTOMO says:

*"for example, when it is scanned clockwise with respect to the reflecting unit 102, irradiation light beam of PSK modulation at frequency of 300 kHz is emitted from the main unit. In case it is scanned counterclockwise, irradiation light beam of*

*continuous modulation with frequency of 15 MHz is emitted from the main unit to measure the distance".*

One cannot deduce an  $fc_i$  and  $N_i$  parameter as claimed from this passage. How can one find  $fc_i = 1.023$  MHz,  $fc = 1.875$  MHz, and  $N_i = 14$  from this paragraph? Thus, these features are not disclosed.

CANGIANI teaches a method for generating, from a space based craft, a global positioning signal having a constant envelope by modulating an in-phase component of the carrier with a first binary modulating signal and a quadrature component of the carrier with at least a second binary modulating signal. Each modulating signal  $S_3$ ,  $S_3$  is fed to a BPSK modulator along with  $\cos(\omega)$ . Each one of a modulating signal  $S_1$  and of an intermodulation term ( $S_1 S_2 S_3$ ) is fed to a BPSK modulator along with  $\sin(\omega t)$  (see col. 4, line 41 - col. 5, line 17).

CANGIANI thus also fails to disclose or teach in any manner a method for generating a modulated navigation signal having four distinct and independent navigation codes modulated according to a 8-PSK modulation onto a single carrier, with a constant envelope, as claimed.

As noted, the claims have been amended to recite the subject matter indicated to be allowable by the Official Action. Accordingly, allowance of all the claims is solicited.

The present amendment is believed to be fully responsive to the pending Official Action.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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**APPENDIX:**

The Appendix includes the following item(s):

- ☒ - a new or amended Abstract of the Disclosure
- ☒ - Replacement Sheets for Figures 1-5 of the drawings